1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x + 7}{8} - \frac{-7x + 7}{5} = \frac{4x - 7}{2}$$

A. $x \in [21.67, 26.67]$

B. $x \in [13.22, 15.22]$

C. $x \in [28.11, 33.11]$

D. $x \in [-2.5, 0.5]$

E. There are no real solutions.

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2. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

   Perpendicular to $4x - 7y = 9$ and passing through the point $(10, -5)$.

A. $m \in [-2.94, -1.6]$ $b \in [11.5, 16.5]$

B. $m \in [-2.94, -1.6]$ $b \in [-14.5, -9.5]$

C. $m \in [-2.94, -1.6]$ $b \in [-18, -14]$

D. $m \in [-1.18, 0.03]$ $b \in [11.5, 16.5]$

E. $m \in [1.29, 2.87]$ $b \in [-23.5, -16.5]$

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3. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.
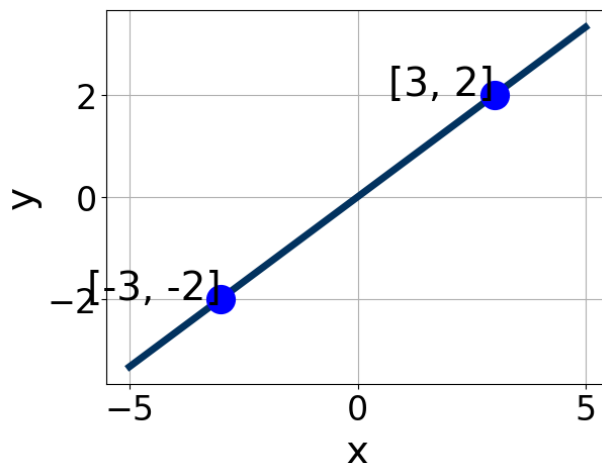
A. $A \in [1.4, 2.2]$, $B \in [2.31, 3.13]$, and $C \in [0, 1]$

B. $A \in [-1.1, 1.8]$, $B \in [-2.36, -0.31]$, and $C \in [0, 1]$

C. $A \in [1.4, 2.2]$, $B \in [-4.83, -2.98]$, and $C \in [0, 1]$

D. $A \in [-1.1, 1.8]$, $B \in [0.09, 1.2]$, and $C \in [0, 1]$

E. $A \in [-2.1, -1.8]$, $B \in [2.31, 3.13]$, and $C \in [0, 1]$

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4. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b.

$$(-6, 6) \text{ and } (-11, -10)$$

A. $m \in [0.2, 4.2]$ $b \in [-27.2, -20.2]$

B. $m \in [0.2, 4.2]$ $b \in [6, 16]$

C. $m \in [0.2, 4.2]$ $b \in [1, 2]$

D. $m \in [0.2, 4.2]$ $b \in [24.2, 27.2]$

E. $m \in [-3.2, -2.2]$ $b \in [-48.2, -42.2]$

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5. Solve the equation below. Then, choose the interval that contains the solution.

$$-17(-16x - 18) = -7(-5x - 9)$$

A. $x \in [-1.71, -1.38]$

B. $x \in [-1.38, -1.03]$

C. $x \in [-1.04, -0.79]$

D. $x \in [1.39, 1.7]$

E. There are no real solutions.

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6. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b.

$$(9, -6) \text{ and } (-2, -2)$$

A. $m \in [-1.08, -0.24] \quad b \in [-0.3, 0.13]$

B. $m \in [-1.08, -0.24] \quad b \in [2.21, 3.36]$

C. $m \in [-0.18, 1.45] \quad b \in [-1.84, -0.28]$

D. $m \in [-1.08, -0.24] \quad b \in [-15.44, -14.63]$

E. $m \in [-1.08, -0.24] \quad b \in [-2.91, -2.1]$

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7. Solve the linear equation below. Then, choose the interval that contains the solution.
$$\frac{-3x + 8}{2} - \frac{-3x - 3}{4} = \frac{-8x - 4}{7}$$

A. $x \in [-9.73, -7.73]$

B. $x \in [-1.67, 1.33]$

C. $x \in [-39.18, -34.18]$

D. $x \in [-13.55, -10.55]$

E. There are no real solutions.

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8. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

   Perpendicular to $5x + 9y = 9$ and passing through the point $(2, 9)$.

   A. $m \in [1.63, 2.26]$ $b \in [-6.8, -4.4]$

   B. $m \in [0.53, 0.7]$ $b \in [2.5, 6.9]$

   C. $m \in [1.63, 2.26]$ $b \in [6.8, 7.5]$

   D. $m \in [1.63, 2.26]$ $b \in [2.5, 6.9]$

   E. $m \in [-2.2, -1.18]$ $b \in [11.5, 12.7]$

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9. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.
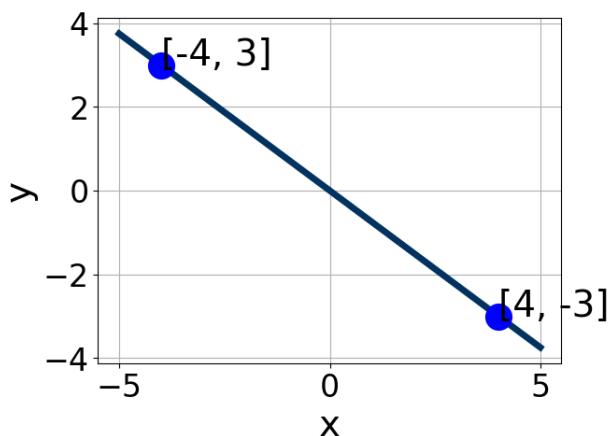
   A. $A \in [2.2, 4.6]$, $B \in [-5.6, -2.4]$, and $C \in [0, 4]$

   B. $A \in [0.3, 1]$, $B \in [-0.8, 1.4]$, and $C \in [0, 4]$

   C. $A \in [-5.2, -2.4]$, $B \in [-5.6, -2.4]$, and $C \in [0, 4]$

   D. $A \in [2.2, 4.6]$, $B \in [3.7, 4.6]$, and $C \in [0, 4]$

   E. $A \in [0.3, 1]$, $B \in [-2, -0.5]$, and $C \in [0, 4]$

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10. Solve the equation below. Then, choose the interval that contains the solution.
$$-10(-8x - 4) = -15(6x - 12)$$

A. $x \in [-1.68, -0.73]$

B. $x \in [0.72, 1.17]$

C. $x \in [1.2, 1.78]$

D. $x \in [21.99, 22.46]$

E. There are no real solutions.